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ABSTRACT

The paper presents a set of linguistic phenomena illustrative of the notion "universal tendency". Linguistic generalizations are regarded here not as isolated, "true-or-false" propositions but as embedded in a hierarchy of competing forces. An "exception" to a universal is thus seen as the result of the prevalence of another conflicting universal tendency. Examples discussed are taken from Latvian child language, Bengali word order, and from the characteristics of the copula in a number of languages, particularly Bengali and Amharic. (Author)

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WORKING PAPERS ON LANGUAGE UNIVERSALS

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A SAMPLE RESEARCH STRATEGY IN LANGUAGE UNIVERSALS*

Charles A. Ferguson

ABSTRACT

The paper presents a set of linguistic phenomena illustrative of the notion "universal tendency". Linguistic generalizations are regarded here not as isolated, "true-or-false" propositions but as embedded in a hierarchy of competing forces. An "exception" to a universal is thus seen as the result of the prevalence of another conflicting universal tendency. Examples discussed are taken from Latvian child language, Bengali word order, and from the characteristics of the copula in a number of languages, particularly Bengali and Amharic.

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* This working paper is essentially the transcript of a talk given at the University of California, Berkeley, in June 1971, edited somewhat and provided with footnotes and references. Most of the illustrative material is taken from Ferguson, forthcoming.

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Among the primary aims of linguists are such things as developing a general theory of language and improving their abilities to characterize languages or varieties of language. In other words, linguists want to develop some kind of general theory of language, and they also want to write better grammars. Of course these are not unrelated tasks; one thing they have in common is the search for basic similarities among languages, that is, similarities that have a maximum amount of generality and a maximum amount of substance or content. Now, there are lots of ways that one can look at these similarities among languages and certain of them we are accustomed to labeling universals. This evening, I just want to play with one way of talking about universals. And that is not to say that every language must have X or that if a language has X, it must have Y, which are kinds of universals that we talk about from time to time. Instead, I am going to talk about the notion of "universal tendency", which means something like this. First, it says that other things being equal, a language will tend to behave in a certain way, and if a language doesn't work this way, then you had better look at the language more closely and find out what's the matter with it, that is, find out what is making it go wrong, why it isn't behaving according to the universal tendency. Second, it says that if we collect enough of these universal tendencies, we observe that they are sometimes in conflict with one another, and if one universal tendency doesn't seem to work out in a particular language it is because some other one took precedence, some other one higher in the hierarchy cancelled it out or "won" in that language.[1]

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[1] The notion "universal tendency" is not different in principle from the notion of "language universal" as used by Greenberg. It merely makes explicit several features which are useful to bear in mind in research on universals. (1) A "universal" may be significant even if it seems not to hold in a number of languages. (2) A counterexample to a proposed universal may only show that the language in question is in some sense abnormal and merits special investigation. (3) Proposed universals must be related to one another in terms of precedence or

Let us now play with this notion of universal tendencies. Let us list some of them, and talk about one possible research strategy for getting at them; and then at the end, even if we decide there are no such things, we may still have found it has been a useful game. In making a little clearer what I mean by universal tendency, I guess Dan Slobin wouldn't mind if I use one of his favorite examples. In general, you can say that a child learning his language will first put words together that correspond to subject and complement without any kind of copula or connecting link, even if the language that he is learning regularly has such a connecting link. It will only be later on that the child will acquire that copula. Let's say that there is a "universal" that, other things being equal, languages are so constructed that if a child is going to learn one, and it is his first language, he'll tend to leave out the copula for a long time and then finally acquire it. But it so happens, if you believe the accounts of a couple of Latvian children learning LATVIAN, that they learn the copula -- they learn the word 'is' -- quite early. From the point of view of universal tendencies that we are taking, we would say: let's look at LATVIAN and see if we really have to abandon this universal, or whether there isn't something peculiar about LATVIAN that takes precedence over this particular universal at this time in this language. And it turns out that in LATVIAN, the word 'is' is also used as a regular affirmative response to questions, or even an affirmation of a previous statement as a way of saying 'yes' (Rūķe-Draviņa 1959: 220, 221). So there

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Footnote 1 continued)
relative power and precise sets of conditions for alternative tendencies must be sought. The notion "universal tendency" may seem weaker than either "universal" or "implicational universal" as commonly used, but when a proposed universal tendency is placed within a hierarchy of tendencies or is seen as part of a set of variously weighted tendencies, the validity of the larger complex may make stronger claims about the nature of language than pure, simple universals. It is worth noting here that the notions of hierarchy and weighting are only partly equivalent to the notion of ordering.

are two competing universals in the LATVIAN case: one holds that the copula is deleted in baby talk and does not appear in the early stages of child language (Ferguson 1971) and the other holds that emphatic affirmative and negative sentence-words like yes and no appear in the early stages of child language. The apparent failure of the one is really only the other one taking precedence.

Let me give one other example, since the first one involved child language acquisition and doesn't sound like the linguistic universals people usually look for. Let's say one might set up a universal tendency that where you have a verb of existence and an indefinite subject, the verb of existence will tend to appear at the front of the sentence or tend to move toward the front of the sentence, no matter where verbs normally appear in that language. For example, it is somehow more natural in ENGLISH to say There is a book on the table than it is to say A book is on the table. That is, we have this preference for putting is further front in sentences like that. In a language which normally puts the verb first anyway, this tendency would not be so striking, of course, and in fact the universal tendency would just be "smothered": it isn't negated but it's not really confirmed either. It would be more noticeable in languages where the verb regularly comes in between subject and complement or object, as in ENGLISH. But, if we look at languages which normally have the verb in final position, we might expect there would not be such a clear working out of that tendency. In BENGALI, for example, the verb normally comes last. And when you have the existential verb (ache) and an indefinite subject, the verb doesn't usually move forward. So, it looks as if the pull of the verb-final position is just too strong for it. But the tendency is there. For example, in story telling, if you say 'once upon a time, there was a book on the table'... and so on, you may put the verb first, you may say "Is a book on the table" ache boĭ tebile instead of bŏi tebile ache, which would be the

normal way of saying it.[2] We can look at this situation as three universal tendencies interacting:

(a) Existential verbs are fronted in sentences with indefinite subjects.

(b) Verb fronting is less powerful in SOV than in SVO languages.

(c) Verbs are fronted in narrative styles.

In this case the extra force of (c) is enough to overcome (b) and let (a) take its course.

Now, if we believe that there are such things as universal tendencies, or at least think it is useful to conceptualize the question of universals in this way, then how do we go about identifying them? One obvious way would be to take a possible tendency, or, if we can't even identify it, preliminarily, a particular set of phenomena -- a "medium size" set preferably -- and look at it across lots of languages. For example, pick a hundred languages and see what they do about a certain kind of verb, or see what they do about some particular kind of construction or set of limitations in phonology or something like that, and then see if we can identify some universal tendency, and try checking it out. That is one strategy, and some of the people in the Language Universals Project at Stanford do spend their time following it. They may not be phrasing their search in terms of universal tendencies, but they do take a set of phenomena and look at them as best they can across 50 or 100 or more languages, in so far as they can find reliable grammars that have the information they need.

Sometimes people do identify universal tendencies in this way, but it is not the strategy that we want to discuss here. The strategy that I want to illustrate is based on looking at one language instead of a lot of languages, looking at one language with great care and intensity, i.e.

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[2] For an attested example cf. Page 1934: 180 "æk chilo casa, ar tar chilo æk chele ..." ("one was farmer and his was one son" 'once there was a farmer and he had a son').

at a limited set of phenomena in the language, and then sitting and thinking for a while, to see if you can guess at some universal tendencies. They may occur to you for various reasons, such as a striking asymmetry of some kind. Anyway, once you think of a tentative "universal tendency" you check it out against other languages that are likely to disconfirm it or give supporting evidence, and you pick out, not any 150 languages, but particular languages that might give some confirmatory evidence or some evidence that you are going in the wrong direction. For example, you might get interested in how verbs of "being" work in BENGALI, and if you look at them intensively and think about them you might guess at a half dozen or so possible universal tendencies, and then you could check them out against particular other languages that you think might be relevant. Let me give one example of this way of proceeding before we get more serious about BENGALI verbs of being. Some languages have a regular way of saying 'is' when you have a subject-complement construction of the equivalence type or attribution of a property or class membership, for example in a sentence like Joe is a carpenter. Other languages don't have a regular way of saying 'is' in sentences like this. For the moment let's not discuss why some language don't have an equivalent for 'is', a copula, or why some languages do. And also, let's not discuss the different kinds of copulas there might be, how one language might have six ways of saying 'is' in subject-complement sentences. Let's just accept the fact that some languages have a copula there, and some languages don't. If we examine one language with care we may note that the copula is always absent under certain conditions, optional under other conditions, and sometimes obligatory. If we thought about it a little bit, we might guess that there are certain preferred contexts in which copulas universally are more likely to be absent. For example, they may be much more likely to be absent in the third person singular than they are in any other person or number, or more likely to be absent in the present

tense or timeless use rather than some other tense or aspect, or more likely to be absent in a main clause than in a subordinate clause. These possible universal tendencies could then be checked with languages which are known to lack a copula in subject-complement sentences and a hypothesis might be supported.

All this is a nice background to noting that BENGALI doesn't have an equivalent for 'is' in a sentence like 'Joe is a carpenter.' or 'Ram is a student.' It is interesting, however, that there are occasions when BENGALI speakers do put something in a sentence like that. Let's take an actual sentence -- 'This is Mr. Dutt' ini dɔtto mɔsaĕ ("this Dutt Mr."). That's the normal way to say it, and it's perfectly all right to say it that way any time. We have a subject and a complement, and no overt equivalent for the BENGALI word 'is'. And let's remember that if there were going to be an equivalent, we would expect it to be at the end of the clause where verbs normally come in BENGALI. We would expect it to come out ini dɔtto mɔsaĕ X: whatever verb the X would be, that's where we would expect it to come. Now, it so happens that when you do put some kind of an overt copula in a sentence like this in BENGALI, you put the form between the ini and the dɔtto mɔsaĕ, that is, between the subject and the complement. And what is more, it's a strange sort of form. It's a form that comes from a verb meaning 'to become', which does serve as a copula sometimes in other connections, and the simple past tense or the present progressive, or, more rarely, even the present may be used. So you can say ini holen dɔtto mɔsaĕ, past 'became'; ini hoccen dɔtto mɔsaĕ, present progressive 'is becoming'; ini hɔn dɔtto mɔsaé, present 'becomes'. All these are possible, although the last one is not very likely, but they all mean 'is', not 'was' or 'is being', and are completely interchangeable as far as the meaning is concerned. They all mean 'This is Mr. Dutt.'

Now, this is an interesting phenomenon. In a language that normally doesn't have any overt equivalent for a copula, when the speakers of the

language do want to put something in, they put it in the wrong place, and it's an abnormal form, that is, it doesn't work the way verbs normally work in that language. Of course, a copula does not have to be a verb, it could be some kind of particle for example, but in this case it is functioning like a verb in having tense markers, personal endings and so forth, but it's also aberrant in having the interchangeable tense possibilities and the wrong position. Let us try for a universal tendency. If a language doesn't have a copula in the sense that 'Joe is a carpenter.' has no 'is', and if the people who speak that language want to put something in as a copula substitute, what would they put in, and where would they put it in? Let's hypothesize a universal tendency to put something aberrant in that doesn't function as a regular verb, and put it between the subject and the complement, no matter where the verb normally comes. Now, let us look for some other languages that don't have a copula, and see whether any of them can have a kind of a pro-copula in this situation. I guess I couldn't help thinking of a number of Semitic languages, ARABIC for one, which have a zero copula. When the speaker of one of these languages wants to, he can put in a kind of pro-copula. And what these Semitic languages do in general is to put in not a verb at all, but a pronoun that means "he" or "she" or "that one" or something like that. So it's certainly anomalous as verbs go. Semitic languages are generally verb-initial languages, so you would expect they ought to put the pro-copula at the beginning of the sentence, but no, they put it between the subject and the complement. So here we have a very nice example supporting our proposed universal tendency.

Well, this is a good illustration of something quite unexpected which you find counterparts for in a number of unrelated languages. There regularly is no copula in constructions like 'John is a carpenter.', but when you do put one in, you put it between the subject and the complement, no matter whether it is a verb-first or verb-last language and

the pro-copula is anomalous in that it doesn't work like other verbs in the language. Is that enough of an illustration of how you might go about following the strategy of looking for a universal tendency by looking at one language that will either confirm or destroy it? For those who feel particularly skeptical about the pro-copula tendency, it's worth pointing out that if you look at some other languages, you find further evidence confirming it. For example, in HUNGARIAN, where the copula normally must be left out if it's third person singular and must be put in in most other cases, there are some sentences where the copula is optional, and in those sentences, the coupla is normally inserted between the subject and the complement (including adverbial phrase) even though the verb 'to be' when it's existential in HUNGARIAN comes at the beginning of the sentence, and when it's the regular copula normally comes at the end of the sentence.

Now let's begin to talk about verbs of being in BENGALI. What kind of a field of inquiry is "verbs of being" anyway? How do you cut up a language so that you look at verbs of being? We have to admit right away that it's an arbitrary kind of decision. It starts out by asking what is the Bengali equivalent for the verb to be in ENGLISH, and of course that's not a very sensible way to proceed. If you do start off that way, you find out that, as in many languages, there is a regular way to express this kind of copulative function and there is a regular way to fulfill certain existential functions and these two manners of expression also act as auxiliaries, dummy carriers of tense and so on. And so gradually you find a complex of facts that seem to fit together into kind of a subsystem in BENGALI, and then you can cut yourself loose from ENGLISH and find some parts of the system that aren't equivalent to ENGLISH be in any way, but join to form a coherent system in BENGALI. So you do have a field of inquiry even though you started out getting it in a fairly arbitrary kind of way. Now let's describe a little bit the system of verbs of

being in BENGALI as far as we need it for our discussion. First, a little polemic, it won't be much, just a few sentences. In many languages where there is no overt copula in a sentence like 'Joe is a carpenter,' it is said that there really is a copula somewhere that has been deleted. This view makes sense in a lot of languages and I wouldn't quarrel with regarding it that way in those languages. But people have said that it's also true of BENGALI. I find that it doesn't work that way in BENGALI, and so I have to make this polemic.

Let us get some of the facts straight. Some BENGALI sentences that are equivalent to ENGLISH sentences with is have an overt morphemic equivalent for is and some don't; for example, the verb ache that I used a little while ago may be present in a sentence or not, some sentences can be said either with or without the ache, so that it really seems as though there is an ache around always which under certain circumstances gets deleted. But this turns out to be a superficial view. If you have a sentence like cheleṭi bhalo 'The boy is good,' you may put ache in and say cheleṭi bhalo ache, but the sentence without ache means 'The boy is good (in moral character),' or 'The boy is good basically,' or something like that and the sentence with ache means 'The boy is well, in good health.' So at least that raises some doubts in our minds. If you ask BENGALI grammarians what has been deleted or is "understood" in the sentence without overt copula, they'll tell you, it's hõe from the verb that means 'become' that was mentioned a little while ago. However, if you actually used the sentence cheleṭi bhalo hõe it doesn't mean 'The boy is good.', it would mean 'The boy becomes good.' Thus, there are three different sentences: one with zero, one with ache, one with hõe, and they have quite different meanings. This is enough to show that the idea of a simple copula which is deleted in the zero copula sentences is not adequate.

If you look at what happens to these sentences in other tenses than the present, or in subordinate clauses such as 'if the boy is good', then you see a lot of funny things happening. BENGALI has two different constructions, zero copula and ache, and each of these has a special negative and a special suppletion in subordinate clauses.

Main clause		Subordinate clause	
Affirmative	Negative	Affirmative	Negative
∅	nɔ̃	hɔ̃	na hɔ̃
ache	nei	thake	na thake

Also, the verbs hɔ̃ 'becomes' and thake 'stays' appear in main clauses with their usual lexical value:

cheleṭi bhalo hɔ̃ 'The boy gets well,' (or less likely, 'The boy gets good.')

cheleṭi bhalo thake 'The boy stays well.' (or less likely, 'The boy stays good.')

(Cf. Sableski 1965; Ferguson, forthcoming)

This is enough background about verbs of being in BENGALI to suggest that it is complicated, and it's much more complicated than that there are just four "copulas". There are other verbs that can be used in parallel existential, copulative, and auxiliary functions, verbs that mean things like 'fall' and 'go' and so forth, which interact with these verbs meaning 'become' or 'stay'.

We have had enough background information for our purposes, I think. Now we want to move to the universal tendencies that I'd like to talk about. If you look at something like this system of verbs of being, you might get the notion that languages in the world are not completely arbitrary in the way they run systems like verbs of being, i.e. there won't be an infinite variety of such systems, but rather there'll be some major types. And if so, it might be reasonable to suspect that systems of verbs of being would be related to other facts about languages. In

particular, they might be related to some overall typological notions about how languages work. For example, languages which characteristically have the verb at the end or the verb at the beginning or in the middle, might tend to have certain kinds of systems of verbs of being.

So let's begin by asking what kind of language BENGALI is, in this kind of general typological framework. Usually there isn't an easy answer to things like that, but in this case, you can turn to the right page in Greenberg and it turns out that there's a neat type that BENGALI fits into: his "rigid III" type. These are languages, and you can all think of some examples, I am sure, where characteristically the verb goes at the end, where adjectives precede nouns, where there are postpositions instead of prepositions and so on. These languages are exclusively or nearly exclusively suffixing, use predominantly postpositions rather than prepositions, and have a case system marked by noun suffixes. Question words like "what", "where", and so forth are typically non-initial and general sentence interrogative particles come at the very end of the sentence, after the verb. Modifiers precede their heads; subordinate clauses including relative expressions precede the main clause; genitives and adjectives precede their nouns. Comparison markers are on the standard noun, that is comparisons take the form 'Y-than X is good' to mean 'X is better than Y'. All those are things Greenberg used to characterize these languages, and there are other features which seem to be present in many of them, possibly all. For example, they have what might be called a "conjunctive" form of the verb with the meaning 'having done something and...'. They have one kind of compound verb where there's a noun-like or an interjection-like preverb combined with a colorless auxiliary of the 'do', 'give', 'say' variety, and another type consisting of the conjunctive form of verb plus one of these auxiliaries. The nouns have an optional plural, that is, there may be a morphological way of expressing plural, but

it's not normally used with numbers. Anyway, this is a fairly neat type in which you can classify lots of your favorite languages. Languages like JAPANESE, for example, clearly belong to it; a number of Uralic and Altaic languages such as TURKISH belong in it, and the language BENGALI, it so happens, clearly belongs in it. So, now the stage is set. We know something about the verbs of being in BENGALI and we know something about this global sort of typology, so that we can see if there's any relationship between them.

First, let us note that languages like JAPANESE and TURKISH have been "rigid III" for as long as we have documentation for them. They may have shifted in details, replaced parts of the systems and so forth, but they have stayed this way for a long time. However, BENGALI is known not to have been that way some centuries ago. SANSKRIT was not like that. MIDDLE INDIC was beginning to be, but when you finally get to modern BENGALI, it is very much like JAPANESE and TURKISH, it has moved all the way over in that direction. This would suggest that if we looked at BENGALI, in particular at some of the salient characteristics of its verbs of being system, and then picked another language that we know started from some other type and has developed into the "rigid III" type, we might expect to find our universal tendencies exemplified. In other words, if the language has separate copula and existential verb and has come to belong to this rigid III category, it should have moved along the same path and should have some of the same characteristics. Is that line of argument clear enough? Then let's look at some of the salient features in BENGALI that we might want to look for in some other language.

We are talking about languages going through some sort of cycles and moving from one general place to another in Greenberg's and other typologies, and going by the same path. I assume BENGALI first started its shift from SANSKRIT to JAPANESE type, let's say, by moving the

verb to the end; that is, that was one of the first things that happened. And it was later, for example, that postpositions replaced prepositions. In other words, there seems to be a certain order or sequence of these events. Just to illustrate what I mean, the Semitic languages of Ethiopia are following roughtly the same path: they started out being verb-initial languages and moved over to be verb-final languages; they used to be prepositional languages, now they are postpositional. And there we have enough documentation, older and current documentation, from different related languages, to see the process at various points. For example, AMHARIC, TIGRE and TIGRINYA have all moved the verb to the end, but TIGRE still has only prepositions, no postpositions; TIGRINYA has prepositions and postpositions, often in combination, that is, with something both before and after the noun. AMHARIC seems to be in a stage of being prepositional-postpositional like TIGRINYA, and Greenberg doesn't include AMHARIC in rigid III for this reason, but in fact it is just about postpositional since typically the preposition part is a colorless ከ- or በ-, with very little meaning, and the postposition carries most of the meaning. Furthermore, in ordinary colloquial AMHARIC today, the tendency is to drop the preposition part and just use the postposition, so that AMHARIC is finally moving all the way over to having postpositions instead of prepositions. Well, that's an illustration of the way this kind of typological shift might have taken place in BENGALI, and in large part I think did.

Now let's suggest a half dozen or so possible universal tendencies on the basis of the BENGALI verbs of being. One is fairly simple. If a language has separate existential and copula verbs, that is if it has different lexical items for the 'is' of 'there is' and the 'is' of 'Joe is a carpenter', and if either one of these is grammatically unique in a language, its negative also will be grammatically unique. By "grammatically unique" I mean it clearly belongs in a certain word class, but is unique

in that class, that is, it doesn't behave like the others in the class -- it may lack six tenses, or have a funny kind of suppletion, or just very obviously not fit. Stated again, if the copula or existential verb is grammatically unique in the affirmative, its negative will not be made the way you normally make negatives in the language either. In BENGALI, to make a negative you normally add na, but the negative of ache is not ache na, which can't be said, but nei instead, an invariable negative existential verb. And also, if you want to negate the zero copula, you don't just put a na in (although as a matter of fact you can, but it's not the normal way to do it); you use a different verb, a negative copula nae, which is conjugated, but is quite defective, and is clearly a grammatically unique item of the language. You know, you hate to make that kind of a universal tendency statement without looking at at least one other language. And it so happens that Lange (1970) wrote a description of verbs of being in MUNDARI, and MUNDARI has a copula menaq which is grammatically unique: "...the Cop menaq [is] conjugated differently from verb roots". Verbs are normally negated by preposing ka in MUNDARI, but it turns out that the negative of the copula is bangai which bears no relation to any other negative in the language. [illegible] sentences containing the Cop menaq, [illegible] sequence ka menaq, a specifically negative [illegible] has a grammatically unique copula and a grammatically unique negative copula (Langendoen 1970).

Let's try a second universal tendency. If you have a separate existential verb and copula in the present tense, the universal tendency is to have them share a past tense. That seems unexpected, that is, you wouldn't have thought of that if you hadn't studied BENGALI or some other languages. In BENGALI the form chilo 'was' may serve for both the zero copula and the existential ache. Well, we just said we should look for at least one other language somewhere, and CLASSICAL

ARMENIAN comes to mind. CLASSICAL ARMENIAN does have several verbs "to be". In particular, there is a present goy which means 'there is' or something like that, and there is a present ē which means 'is' as a copula and they share a past tense eɫew which goes for both of them but is not clearly related to either one etymologically (Ó Coiġneallaiġ 1968). CLASSICAL ARMENIAN is a fine confirmatory language as far as we're concerned, it bears out this particular universal tendency.

We can build on that past tense business a little bit. As you remember, ache and zero copula have quite irregular negatives; they are grammatically unique and have grammatically unique negatives. The past tense of both these, chilo, has a negative made in just the ordinary regular way, chilo na. Let us hazard as a third universal tendency that the past tense of a verb of being will have a regular negative. Well, in MUNDARI, to go back to Mr. Langendoen, the past tense of menaq is tai and to negate it you just add the ka to it, as with any other verb. MUNDARI isn't really such a good example for our purposes, however, because it doesn't have a separate existential verb and copula. So let's look at another language.

There is a language called BILIN spoken in northern Ethiopia, on which Frank Palmer wrote an article called "Bilin 'to be' and 'to have'", giving all the forms (Palmer 1963). And it's just marvelous, there is a grammatically unique negative for the existential and for the copula, they share a past tense, and the past tense makes its negative regularly. So we have some evidence for that universal tendency.

Let's look at something else. In many languages there are suppletions of copulas or existential verbs which come from other verbs in certain semantic ranges, for example, verbs meaning 'become', 'stand', 'stay'. That is, the suppleting verb is used as an ordinary verb with a full set of forms, but is also used for a tense or other form for which the verb of being is defective.

In BENGALI the verb 'dwell, live (somewhere), stay' is used in place of the present tense of ache and in place of non-present tenses of ache (e.g. future), and as we saw before, in certain kinds of subordinate clauses (e.g. conditionals). Similarly the verb 'become' is used in place of the present-tense valued zero copula in subordinate clauses and in non-present tenses such as the future. Let us hazard the universal tendency that if a language has separate existential and copula, and if it has suppletion by verbs 'to become' and 'to dwell', then the verb 'to become' will be the suppletive form for the copula and the other one will be for the existential verb.

Let's try a final pair of universal tendencies. On the basis that BENGALI has a present progressive bolce 'is saying' and a perfect bolece 'has said', let us hypothesize that in a language with separate existential and copula, the existential verb will tend to be used as an auxiliary, combining with the conjunctive form of the verb mentioned before, to form a tense of either present state, 'is now doing', or perfect resultative type, 'has done'. And as such, to push the universal tendency a little bit further, the existential verb in this construction tends to become a tense-forming suffix rather than just a kind of auxiliary. In JAPANESE, for example, there is a regular construction of conjunctive plus existential (e.g. shite iru) meaning either 'is doing' or 'has done (and the effect is still there)'.[3] In asserting that in

[3] In JAPANESE the construction has both values. In BENGALI there are two different constructions, one clearly the conjunctive plus existential (value: perfect) the other a form of the verb whose etymology is unclear (active participle? conjunctive?) plus existential (value: present progressive). When the history of a language is well enough documented it may be possible to see successive re-formations of these tenses. In JAPANESE the conjunctive form in -te is apparently historically a conjunctive form plus existential which has lost its original morphemic identity; in BENGALI where the morphemic identity of the perfect suffix is becoming less clear, a new formation of conjunctive plus existential for a particular class of verbs is coming into use.

verb-final languages of this kind, if you have separate existential and copula, the existential will tend to be used with the conjunctive form of the verb to produce sets of forms of either present state or perfect meaning. We may note that it is not too different from tendencies that we're familiar with in some European languages where a verb "to have" is combined with a past participle to make a perfect or a copula is combined with a present participle to make a tense of present state. So, the kind of tendency that we're talking about here in these languages is parallel with other tendencies exemplified in languages of different structures.

Now let's stop listing these universal tendencies and get to a striking bit of evidence that maybe all these universal tendencies have something to them. So far we've really been playing, because citing BENGALI and one other language in each case is not too convincing. But let's check a set of facts in the AMHARIC language which should be parallel to BENGALI. BENGALI started out being something else and it ended up being one of these typical SOV languages, and it now has separate existential and copula verbs. AMHARIC also started out with a different kind of grammar and ended up being this "rigid III" type and it has a separate existential and copula. So the stage is all set. What we should do then is to look at AMHARIC and go right down through the universal tendencies and see if it matches BENGALI.

Twelve features of the 'verbs of being' system are identical in BENGALI and AMHARIC.

1. Both BENGALI and AMHARIC have a present tense existential verb inflected for persons.

2. They both have a present tense copula different from the existential (in one case a zero).

3. They both have a negative existential verb irregularly formed.

4. They both have a present tense negative copula irregularly formed, inflected for person.

5. They have a common past tense for the copula and existential verb.

6. They have a common past tense negative regularly formed.

7. Other tenses of the copula, including the imperative and the infinitive are suppleted by regular forms of the verb 'to become'.

8. Other tenses of the existential verb, including the imperative and the infinitive are suppleted by regular forms of the verb 'to stay' or 'to dwell'.

9. In both languages the present tense of the existential verb can be suffixed to the conjunctive yielding a perfect tense.

10. The common past tense suffixed to the conjunctive yields a kind of emphatic past tense something like the ENGLISH past perfect ('had done') but only partly overlapping with it.

11. In both languages the present tense of the existential verb is suffixed to verbs yielding a present continuous tense.

12. The common past tense is suffixed to verbs yielding a past continuous tense.

So there are twelve distinct features which match exactly point for point right down the line in BENGALI and AMHARIC. BENGALI and AMHARIC are unrelated languages; they have never been in contact with one another as far as anybody knows. And the particular lexemes and grammatical morphemes that we're talking about don't show any phonological similarities. For example, the present tense negative existential verb irregularly formed is nei in BENGALI and yällam in AMHARIC. There has been no borrowing and there is no genetic connection but there is a point for point agreement on these twelve features in the verbs of being systems for AMHARIC and BENGALI. Now, it's true that this could just be coincidence, but it seems highly unlikely. That is, we set the stage that way, finding a language which has moved through time, changing its general

typological classification this way and has separate existential and copula. This would be quite a set of coincidences to account for. It is also possible that our universal tendencies are not the ones at work,[4] that a different set of principles or rules or universals are involved here that account for this striking similarity in BENGALI and AMHARIC. But for one evening of playing around with strategies for getting at universals, I think we might let ourselves have the pleasure of saying that maybe these universal tendencies are responsible for it, and even if, in the final analysis, this is not so, we may still recognize that we have found one particular, viable strategy for getting at some universal features about language, contributing either to a general theory of language or to improvement in the writing of grammars. The strategy is to take one particular set of phenomena in a given language that seems to be a natural class of phenomena in some sense, look at it very intensively, trying to guess at some "universal tendencies", and then think of languages that might give evidence and then check it out, and give an evening's talk about it or write it up in some way so that more people can have a chance to check out the particular universals that you have guessed, or better yet, find still more basic principles that underlie them.

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[4] For example, tendencies which have to do with tense neutralizations in copulas and the development of tense-aspect systems in general might account for the congruences all apart from the typological considerations considered basic here. Identification and substantiation of such tendencies, however, seems more problematic than the argumentation offered here.

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